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Nobuyuki Tanaka

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EXAMINER

VAN HANDEL, MICHAEL P

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/824,035	Applicant(s) TANAKA, NOBUYUKI	
	Examiner MICHAEL VAN HANDEL	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12 and 14-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12 and 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/27/2007 has been entered.

Response to Amendment

1. This action is responsive to an Amendment filed 12/27/2007. Claims **1-10, 12, 14-23** are pending. Claims **1, 2, 4, 6-8, 10, 12, 14-17, 22** are amended. Claims **11, 13, 24, 25** are canceled.

Response to Arguments

1. Applicant's arguments regarding claims **1, 3, 4, 6-8, 10, 12, 14-17**, and **19-22**, filed 12/27/2007, have been fully considered, but they are not persuasive.

Regarding claim **7**, the applicant argues that the amended claim does not recite "the second decrypting module." The examiner respectfully disagrees. Claim **7** still recites "the audio decoder which receives the audio signals from the second decrypting module and decodes them," as currently claimed. See the rejection under 35 USC 112, first paragraph in the Office Action below.

Regarding claim 8, the applicant argues that the amended claim reflects the embodiment of the invention shown in Figure 10. The examiner respectfully disagrees. Regarding Figure 10, Applicant's specification states that the reproducing device shown in Figure 10 is different from the devices shown in Figures 5 and 6 in that digital content has been already separated into video data and audio data when the digital content is supplied to the device (p. 4, paragraph 73 of published version of Applicant's specification US 2003/0208766). Data entered from a local area network 102 are stored in a mass memory unit 602. Herein, the data has been already separated into video data and audio data, and the video data and the audio data are individually stored in different areas in the mass memory unit 602 (p. 4, paragraph 75). Applicant's specification notes that description about a backup reproducing device with respect to Figure 10 is omitted, but the reproducing device according to this embodiment also is applied to the backup reproducing device (p. 4, paragraph 78). Applicant's specification then notes that the video signal output device 605 and the audio signal output device 610 of the reproducing device shown in Figure 10 can output the corresponding signals to the AV switching device 204 in the same way as shown in Figs. 5 and 6 (p. 4, paragraph 79). That is, Figure 10 is shown only in the context of a single one of the reproducing or backup reproducing device. It illustrates an embodiment where the *AV separating* module is unnecessary and does not relate to the AV input *switching* device (italicized for emphasis). Claim 8 depends on claim 1, which recites that the system includes both a reproducing device and a backup reproducing device. The examiner notes that Applicant's specification does not specify an implementation in which both the reproducing device and backup reproducing device are used and video and audio content is supplied other than through an audio-visual switching device. In fact, the examiner notes that,

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without the AV switching device, the system would not switch output data between the reproducing device or backup reproducing device depending on whether the reproducing device were active (p. 2, paragraphs 38, 39). See the rejection under 35 USC 112, first paragraph in the Office Action below.

Regarding claim 1, the applicant argues that the references would not have been combined as alleged by the Examiner, and that, even if combined, the alleged combination of references would not teach or suggest each and every feature of the claimed invention. The examiner respectfully disagrees. The applicant specifically argues that the examiner applies a circular reasoning argument, and that instead of pointing out to the suggestion, motivation, expectation, or reasoning that Takamori can be combined with Morley et al., the examiner states that a back-up system can be used for backup purpose. Takamori states that some prior art electronic equipment are known to operate on the so-called dual operation method that involves furnishing two units of the same component. Takamori further states that this is done for backup purposes. For example, a main power unit and sub power unit are provided, the sub power unit taking over the main power unit in case the latter fails (col. 1, l. 11-16). Thus, the examiner maintains that it would have been obvious to one of ordinary skill in the art at the time that the invention was made to provide two units of the same component for backup purposes. Furthermore, the disclosure of Morley et al. is replete with discussion about use and benefit of component redundancy in a distribution network. Some of the redundant components can be operated in a “standby” or “warm start” mode as desired for rapid selection and switch over when needed (Morley et al. p. 12, l. 7-9; p. 28, l. 15-19; p. 29, l. 21-32; p. 30, l. 1-17; p. 36, l. 12-24; & p. 38, l. 14-19). Takamori is directed toward a generic video switcher apparatus with a

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back-up system. In further support of Examiner's motivation, Takamori states that severe troubles, such as stoppage of broadcast signal transmission are avoided through changeover from a failed block to a normal block (col. 3, l. 66-68; & col. 4, l. 1-2) and Morley et al. states that redundant processing capabilities assure reliable operation in highly time sensitive and demanding presentation markets, such as for first run motion pictures (p. 30, l. 12-15). Thus, the examiner maintains that one of ordinary skill in the art at the time that the invention was made would have been motivated to combine Morley et al. and Takamori for the stated reasons.

Further regarding claim 1, the applicant argues that the combination of Morley et al., Takamori, and Duso et al. does not teach or suggest a backup reproducing device having an audio decoder and a video decoder that decodes digital content supplied from a mass memory unit. The examiner respectfully disagrees. As noted in the Office Action below, Morley et al. discloses a reproducing apparatus 130A having an audio decoder 298 and a video decoder 296 that decodes digital content supplied from a mass memory unit 123 (Figs. 2B, 11). Morley et al. does not specifically disclose a backup reproducing device having an audio decoder and a video decoder that decodes the digital content supplied from a mass memory unit; however, Takamori discloses a video switcher apparatus with a main unit for supplying video and audio signals and a back-up reserve unit including video and audio components identical to those in the main unit (col. 2, l. 16-20). The examiner maintains that it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the decoder module of Morley et al. to include a back-up unit with identical video and audio components and a video switcher for switching between the decoder and the back-up system upon failure of the main unit, such as that taught by Takamori for the reasons stated above.

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Regarding claims **2, 5, 9, and 18**, the applicant argues that the examiner has failed to address the claims. The examiner respectfully disagrees. The limitations of claims 2, 5, 9, and 18 are discussed and met with respect to other claims and have been grouped accordingly in the Office Action below.

Regarding claims **4, 7, and 21**, the applicant argues that Takamori merely teaches processing video and audio signals and lacks the teachings of an encryption/decryption module, an audio-visual separating module, a video decoder, a video signal output device, an audio decoder, and an audio signal output device. The examiner notes that Morley et al. discloses all of these features in a decoding unit 130A (Figure 11) and that the examiner has relied on Takamori to teach utilizing a video switcher and a back-up reserve unit including video and audio components identical to a main unit. The examiner maintains that it would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify Morley et al. in view of Takamori and that one of ordinary skill in the art would be motivated to do so for the reasons stated regarding claim 1 above.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims **7, 8** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Referring to claim 7, the examiner fails to find support for a second decrypting module in Applicant's specification within the context of the claim. Although the specification describes a decrypting module in each of the reproducing device and the back up reproducing device as shown in Figures 5 and 6, the specification fails to describe two decrypting modules in each. It is further noted that the specification describes the decrypting modules as decrypting content, not as separately decrypting video content and audio content. The examiner acknowledges that Applicant's specification discloses two encrypting modules in a reproducing device (Fig. 10); however, the examiner fails to find support for two decrypting modules.

Referring to claim 8, the examiner fails to find support in Applicant's specification for a video signal output device that supplies decoded video signals to a projecting device other than through a audio-visual input switching device and for an audio signal output device that supplies decoded audio signals to an audio processor other than through an audio-visual input switching device in the context of the claim. Applicant's specification states that the difference between the reproducing device shown in Figure 10 and the devices shown in Figures 5 and 6 is that the content has already been separated into video data and audio data when the digital content is supplied to the device. That is, the video data and audio data are already individually stored in different areas in the mass memory unit (see p. 4, paragraphs 73 and 75 of published version of Applicant's specification US 2003/0208766). Applicant's specification then states that the reproducing device can output the corresponding signals to the AV switching device in the same way as shown in Figs. 5 and 6. That is, as similarly shown in Figs. 5 and 6, both the video and

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audio signals will be output through the switching device and the only difference in this scenario would be a lack of the AV separating module. Applicant's specification describes the AV switching device as selecting between the reproducing device and the backup reproducing device, not between the video signal and the audio signal (p. 2, paragraph 39 of Applicant's specification). The AV switching device appears necessary, as Applicant's specification fails to describe a way of switching between the reproducing device and backup reproducing device without using any sort of AV switching device. Since claim 1 requires a reproducing device and a backup reproducing device, the examiner notes that it must have an AV switching device to selectively output data from either the reproducing device or the backup reproducing device. As such, the examiner fails to find support for the phrases "other than through an audio-visual input switching device," as currently claimed.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-7, 9, 10, 12, 14-23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Morley et al. in view of Takamori and further in view of Duso et al.

Referring to claims **1, 2, 5, 9, 12, 14-18, 22, and 23**, Morley et al. (WO 99/59335) discloses a digital content reproducing/projecting system/method/recording medium/program/program product comprising:

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- a movie company terminal 108 which stores and manages a digital content of movies (p. 18, l. 9-32; p. 19, l. 1-23; & Figs. 2A, 3);
- a content delivery terminal in communication with the movie company terminal via a network (p. 25, l. 23-30 & Figs. 2A, 5); and
- a projecting system (theater system) which is connected to the content delivery terminal via the network, receives the digital content from the content delivery terminal via the network, and reproduces the digital content to show a movie (p. 11, l. 26-32; p. 12, l. 1-6; p. 31, l. 13-16; p. 44, l. 12-19; & Figs. 2B, 7), wherein the projecting system comprises a reproducing device 130A (p. 16, l. 31-32; p. 17, l. 1-4; & Fig. 2B) having an audio decoder and a video decoder that decodes the digital content supplied from a mass memory unit (p. 16, l. 17-21, 25-32; p. 17, l. 1-4; & Figs. 2B, 11).

Morley et al. further discloses using redundancy of components to provide backups in the distribution system. Some of the redundant components can be operated in a “standby” or “warm start” mode as desired for rapid selection and switch over when needed (p. 12, l. 7-9; p. 28, l. 15-19; p. 29, l. 21-32; p. 30, l. 1-17; p. 36, l. 12-24; & p. 38, l. 14-19). Morley et al. does not specifically disclose a backup reproducing device having an audio decoder and a video decoder that decodes the digital content supplied from a mass memory unit while the reproducing device periodically sends a first predetermined signal indicating progress of reproducing of the reproducing device, to the backup reproducing device, and starts processing the decoded digital content in synchronization with the first predetermined signal and supplying the signals to reproduce the movie in addition to the decoding process when the reproducing

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device stops sending the first predetermined signal. Takamori discloses a video switcher apparatus with a main unit for supplying video and audio signals and a back-up reserve unit including video and audio components identical to those in the main unit (col. 2, l. 16-20). Self-diagnostic portions 9 supervise the operating status of the main and reserve blocks. If any of the self-diagnostic portions detects a failure, the output of the applicable self-diagnostic portion causes the switching portion 5 to switch from the failed block to the other block (col. 2, l. 26-49). It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the decoder module of Morley et al. to include a back-up unit with identical video and audio components and a video switcher for switching between the decoder and the back-up system upon failure of the main unit, such as that taught by Takamori in order to avoid severe troubles, such as stoppage of signal transmission (Takamori col. 1, l. 11-16; col. 3, l. 66-68; & col. 4, l. 1-2), thereby assuring reliable operation in highly time sensitive and demanding presentation markets (Morley et al. p. 30, l. 12-15).

The combination of Morley et al. and Takamori does not specifically teach that the reproducing device periodically sends a first predetermined signal indicating progress of reproducing of the reproducing device, to the backup reproducing device, or that the backup device starts processing the decoded digital content in synchronization with the first predetermined signal when the reproducing device stops sending the first predetermined signal. Duso et al. discloses a video server that has dual redundant controller servers 28, 29 and multiple stream servers 21 to permit recovery from controller server and stream server failures (col. 49, l. 2-5). Initially, one of the controller servers is designated as a master controller and the other is designated a slave. A three-second "heartbeat" signal is sent over both channels of the internal

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Ethernet 26 from the master controller server to the slave controller server. The heartbeat signal indicates whether or not the master controller server has any failure. The slave controller server assumes master status when it fails to receive the heartbeat signal from the master controller server within the three-second “heartbeat” interval (col. 49, l. 66, 67; col. 50, l. 1-13, 42-63; & Figs. 2, 39). Similarly, if a heartbeat is not received over the internal Ethernet from each of the stream servers within a certain time-out period, failover is performed transparently through network switching (col. 53, l. 39-46, 56-63). The examiner interprets a “heartbeat” signal to be a first predetermined signal indicating progress of reproducing of the reproducing device, to the backup reproducing device. Duso et al. further discloses backing up to the last known point in the stream known to have been transmitted before failure, and assigning a new stream server to stream the video data from that point (col. 54, l. 35-50). It would have been obvious to modify the decoder and backup unit in the combination of Morley et al. and Takamori to include a periodic heartbeat signal that, when not received, indicates that the unit be switched and output resumed from the last point, such as that taught by Duso et al. in order to permit recovery from video stream failure with little or no disruption of client services (Duso et al. col. 49, l. 2-7).

Further referring to claims **14-17**, Morley et al. discloses:

- at the movie company terminal:
 - o requesting registration of a digital content of a movie with the content delivery company terminal and sending the digital content of the movie in response to a request to register from the content delivery company terminal (p. 29, l. 21-32; p. 30, l. 1-12; & Fig. 8);
- at the content delivery company terminal:

- sending a request to register the digital content of the movie to the movie company terminal in response to a request to register from the movie company terminal (p. 29, l. 21-32; p. 30, l. 1-12; & Fig. 8);
- receiving the digital content of the movie from the movie company terminal (p. 13, l. 31-32 & p. 14, l. 1); and
- sending the digital content of the movie to a movie theater terminal that includes the reproducing device and the backup reproducing device (p. 14, l. 1-4).

Referring to claim **3**, the combination of Morley et al., Takamori, and Duso et al. teaches the digital content reproducing system of claim 2, wherein the projecting system further comprises:

- a projecting device which receives the video signals from the audio-visual switching device and projects them on a screen (Morley et al. Fig. 11); and
- an audio processor which receives the audio signals from the audio-visual switching device and outputs them to a loudspeaker (Morley et al. Fig. 11).

Referring to claims **4**, **7**, and **21**, note the rejection of claim 7 under 35 USC 112, first paragraph above. The combination of Morley et al., Takamori, and Duso et al. teaches the digital content reproducing system of claims 1 and 3, wherein the reproducing device and the backup reproducing device comprise the same elements (as taught by Takamori above) and each of the devices comprises:

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- an encrypting/decrypting module 300 which is connected to the mass memory unit and encrypts the digital content received from the mass memory unit (Morley et al. Fig. 11);
- an audio-visual separating module 292 which receives the digital content from the encrypting module and separates them into the video signals and the audio signals (Morley et al. Fig. 11);
- the video decoder 296 which receives the video signals from the audio-visual separating module and decodes them (Morley et al. Fig. 11);
- a video signal output device 296 which receives the decoded video signals from the video decoder and outputs them to the audio-visual input switching device (Morley et al. Fig. 11);
- the decrypting module which decrypts the audio data received from the mass memory unit (Fig. 11);
- the audio decoder 298 which receives the audio signals from the audio-visual separating module and decodes them (Morley et al. Fig. 11); and
- an audio signal output device 298 which receives the decoded audio signals from the audio decoder and outputs them to the audio-visual input switching device (Morley et al. Fig. 11).

Further referring to claim 7, Morley et al. discloses that the digital is individually supplied in the form of video data and audio data (Morley et al. p. 14, l. 5-19).

Referring to claims 6, 10, 19, and 20, the combination of Morley et al., Takamori, and Duso et al. teaches the digital content reproducing system of claims 5, 9, and 18. The

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combination of Morley et al., Takamori, and Duso et al. does not specifically disclose that the backup reproducing device sends a second predetermined signal, to the reproducing device, to instruct the reproducing device to stop, after the backup reproducing device starts the sending process; however, Duso et al. further discloses that, when the slave controller discovers an error in the master controller that requires it to become the master controller, it first assumes the context of the master controller and then sets its M/S flag to assume the master status and clears the M/S flag in the failed master controller. This ensures that write access by the master controller server will cease within a certain time after the slave controller becomes the master (col. 50, l. 55-67 & col. 51, l. 1-30). The examiner interprets changing the master to slave status, such that the failed device ceases to have write access as instructing a reproducing device to stop. It would have been obvious to one of ordinary skill in the art at the time that the invention was made to modify the backup unit in the combination of Morley et al., Takamori, and Duso et al. to include picking up where the failed device left off and stopping write access of the failed device, such as that taught by Duso et al. in order to synchronize the devices and ensure that the failed device ceases to operate (Duso et al. col. 51, l. 23-29).

Referring to claim 8, note the rejection under 35 USC 112, first paragraph above. The combination of Morley et al., Takamori, and Duso et al. teaches the digital content reproducing system of claim 1, further comprising:

- a video signal output device 132A which supplies decoded video signals to a projecting device other than through an audio-visual input switching device (Morley et al. Fig. 11); and

- an audio signal output device 134A which supplies the decoded audio signals to an audio processor other than through an audio-visual input switching device (Morley et al. Fig. 11).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL VAN HANDEL whose telephone number is (571)272-5968. The examiner can normally be reached on 8:00am-5:30pm Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Chris Kelley/
Supervisory Patent Examiner, Art Unit
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MVH

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